Prioritising health in the early years

Workshop report

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The Academy of Medical Sciences

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All web references were accessed in April 2024

Prioritising health in the early years

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Workshop statement

‘Thrive by five’: We need transformational changes to address the worrying decline in children’s health and wellbeing.

Governments have a key role to play in addressing inequities and establishing the systems and support frameworks to drive these changes.

A recently published report from the Academy of Medical Sciences, ‘Prioritising early childhood to promote the nation’s health, wellbeing and prosperity’ highlighted how the health and wellbeing of young children, aged 0 - 5 years, has deteriorated markedly in the UK. [1] The UK is also seeing an increase in health inequity, with children from more disadvantaged backgrounds experiencing poorer health outcomes over their lifetime.

Similar trends have been seen in some other high-income countries, and in February 2024, the Academy of Medical Sciences convened a policy workshop with over 40 representatives from the UK, Australia, Canada, Japan, New Zealand, Singapore, South Korea, and the US. The workshop reviewed the current state of play in respective countries and the initiatives that are being taken to improve child health and wellbeing, and address inequities. Participants included parent representatives, who provided critical input from the health and social care service-user perspective, as well as researchers and policy professionals.

Participants noted that recent trends have major consequences. Exposures and experiences in early life can have a long-lasting influence on mental and physical health for later life, so poor health and delayed development in childhood could last throughout adulthood.[1] **The early years of life, therefore, provide a crucial window of opportunity to improve health in the short and long term**. As well as being a lost opportunity for individuals, this is also having profound consequences across nations more broadly, due to poor health outcomes leading to increased economic costs to society.

Workshop participants highlighted how child health, development and wellbeing are highly dependent on social and environmental factors, with many being related to poverty, discrimination, and racism. Factors include access to safe local and online environments, green and play spaces, opportunities to develop academic and social skills, food security, quality of work and economic opportunities for caregivers, quality of housing, and availability of healthcare and social support services. It was argued that **multiple aspects of modern life are preventing parents of young children and other caregivers from providing a supportive and nurturing environment in the countries represented at the workshop.** As well as affecting child and family health and wellbeing, these factors are also deterring adults from starting a family, particularly in some Asian countries, where birth rates have fallen alarmingly.

[1] Academy of Medical Sciences (2024). *Prioritising early childhood to promote the nation’s health, wellbeing and prosperity*. https://acmedsci.ac.uk/file-download/96280233

To address these challenges, workshop participants suggest that in their respective countries:

1. **Children and families should be at the heart of developing solutions** to better health, education, wellbeing, and equity. These solutions will require a unifying, cross-sectoral vision at local, regional, and national levels using evidence to inform decisions.
2. **This unifying, cross-sectoral vision will enable governments to address the inequities**, often driven by poverty, discrimination, racism, and other social determinants, which are leading to the decline in children's health and wellbeing.
3. **Transformational change will be needed over generations** to improve child health and wellbeing, so policies and funding must be sustained and co-ordinated to tackle inequities.
4. **We already have a strong evidence base to support some effective solutions**, as highlighted in the Academy's UK report[1] and by participants at the workshop; policymakers should focus on implementing these solutions, working closely with children and families.
5. **Researchers should work across borders and disciplinary boundaries** to investigate the factors affecting the health and wellbeing of young children. This should be supported by effective, co-ordinated longitudinal data platforms (e.g. ECHILD),[2] to allow for nimble surveillance, evaluation of programmes and policies, and economic assessments to guide resource allocation decisions.

[2] University College London (2024). *ECHILD project website: ECHILD stands for Education and Child Health Insights from Linked Data*. https://www.ucl.ac.uk/child-health/research/population-policy-and-practice-researchand-teaching-department/cenb-clinical-20

Introduction

A synthesis of evidence published by the Academy of Medical Sciences, 'Prioritising early childhood to promote the nation's health, wellbeing and prosperity' published in February 2024, identified a decline in the health of the UK's young children (under 5 years of age).[1] Between 2014 and 2017, infant mortality began to rise, with the UK ranking 30th out of 49 OECD countries for infant mortality. More than a fifth of children aged 5 years are overweight or obese, and nearly a quarter are affected by tooth decay.

Equally concerning is the **social patterning** of these effects. Infant mortality, for example, is strongly associated with socioeconomic disadvantage – with each increase in deprivation level, infant mortality increases by 10%. Children in the poorest fifth of families are 12 times more likely to experience poor health and educational outcomes by age 17 compared with more affluent peers. These patterns mirror wider **health inequities** within the UK.[3]

There are multiple reasons to be concerned about this situation. From a **rights-based perspective**, child health is seen as a fundamental human right. The UN Convention on the Rights of the Child, for example, states that children have the right to enjoy the highest attainable standard of health and access to healthcare services.[4] This legally binding treaty means that every child from the participating countries in the treaty is entitled to more than 40 specific rights, including health and welfare rights and rights for children with disabilities.

As well as the moral case, there are strong **economic arguments** for safeguarding child health. Healthier children require fewer medical interventions, lowering the burden on health systems. Furthermore, the impacts of poor health in childhood and delayed development can last well into adulthood. Health conditions arising in childhood can persist into adulthood, or increase the risk of poor health later in life. Delayed development can have lifelong impacts on educational attainment and earning potential. Both these factors – poor health in adulthood and wider impacts on human capital – can have lasting effects on both individuals and national economies.[5] [6] Not addressing issues early incurs at least an estimated £16 billion in future costs in England alone.[7] The 2010 Marmot Review estimated that health inequalities in the UK cost £31–33 billion a year in lost productivity, and £20–32 billion a year in lost tax revenue and higher benefit payments.[3]

This **life-course perspective** extends even further back in time. Adversity experienced in the womb during pregnancy can lead to restricted foetal growth or prematurity, as well as a

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[3] Marmot M (2020). *Health equity in England: the Marmot review 10 years on*. BMJ **368**

[4] UNICEF (1989). *Convention on the Rights of the Child*. http://www.unicef.org/child-rights-convention/convention-text

[5] Hanushek E & Wößmann L (2007). *The Role of Education Quality in Economic Growth.* http://documents1.worldbank.org/curated/en/260461468324885735/pdf/wps4122.pdf

[6] The Health Foundation (2022). *Is poor health driving a rise in economic inactivity?* https://www.health.org.uk/news-and-comment/charts-and- infographics/is-poor-health-driving-a-rise-in-economic-inactivity

[7] Royal Foundation Centre for Early Childhood (2021). *Big change starts small.* https://assets.ctfassets.net/qwnplnakca8g/2iLCWZESD2RLu24m443HUf/1c802df74c44ac6bc94d4338ff7ac53d/RFCEC_BCCS_Report_and_Appendices.pdf

reprogramming of foetal development that has health implications well into adulthood.[8] The 'developmental origins of health and disease' perspective emphasises the critical time window of the first 1000 days for establishing a lifelong developmental trajectory.[9] Even beyond this period, suboptimal development can have important long-term consequences, but may also be amenable to intervention.[10]

Although a child's ability to thrive depends to some degree on their genetic inheritance, for the vast majority of children, social and environmental factors have the biggest impact on health and development. These **social determinants of health** are wide-ranging, including the family environment in which children grow up, their wider social environment, educational opportunities, and the physical environment to which they are exposed.

Social determinants of health account for an estimated 50%–80% of health outcomes, compared with about 10%–20% for clinical care.[11] There are many ways in which factors such as poverty, unemployment and poor housing can affect child health, often indirectly and through complex pathways of causation. In addition, they are a critical cause of health inequities – those with fewer resources typically experience less healthy environments.[12]

Biological and social impacts combine to maintain intergenerational inequities. Addressing inequities in childhood can help to break this cycle, delivering benefits to current and future generations.[13]

The UK is not the only high-income country concerned about trends in child health and development. The issue of declining child health and growing health inequities, including effects on disadvantaged populations for example indigenous communities, has been highlighted in multiple other high-income countries. Although contexts differ, many of the contributory factors, such as poverty, poor nutrition and housing insecurity, are common across them.

Recognising that there could be international commonalities, the UK Academy organised an international policy workshop in February 2024 to compare the state of child health and inequities in a range of high-income countries and to discuss existing and potential policy actions. Participants included researchers, policymakers and parents. As well as the UK, the workshop featured contributors from Australia, Canada, New Zealand, Japan, Singapore, South Korea and the US, with introductory talks providing a brief overview of the state of play in each country represented.

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[8] Gluckman P *et al*. (2016). *The Developmental Origins of Health and Disease (DOHaD) Concept: Past, Present, and Future*. In Rosenfeld C (2016). The Epigenome and Developmental Origins of Health and Disease. Elsevier.
[9] Darling JC *et al.* (2020). *The First Thousand Days: early, integrated and evidence-based approaches to improving child health: coming to a population near you?* Arch Dis Child. 2020 Sep;**105,** 837–841.
[10] Georgiadis A & Penny ME (2017). *Child undernutrition: opportunities beyond the first 1000 days.* Lancet Public Health **2(9),** e399.
[11] Moriarty C (2023). *Acting on the wider determinants of health will be key to reduced demand*. https://www.england.nhs.uk/blog/acting-on-the-wider-determinants-of-health-will-be-key-to-reduced-demand/
[12] The King's Fund (2020). *What are health inequalities?* https://www.kingsfund.org.uk/insight-and-analysis/long-reads/what-are-health-inequalities
[13] Brown H *et al.* (2022). *Editorial: Intergenerational Health Inequalities*. Front Public Health **10**, 888995.

The state of play of child health and wellbeing

United Kingdom

Professor Helen Minnis FMedSci, Professor of Child and Adolescent Psychiatry at the University of Glasgow, and Ngawai Moss, a parent representative, presented an overview of the UK Academy's recent report, giving a brief overview of the state of child health in the UK. They also highlighted recent policy initiatives, including the dental recovery plan,[14] Family Hubs and the Start for Life programme,[15] and an expansion of free childcare.[16] They noted that the UK's main opposition party at the time (February 2024), Labour, has developed a Child Health Action Plan setting out its priorities.[17]

Australia

Professor Melissa Wake FRACP FAHMS, Scientific Director of the Generation Victoria Initiative, Murdoch Children's Research Institute (MCRI) in Melbourne, discussed the concerns that have been raised about the state of child health in Australia.

More than 60% of children 2 years or older have at least one ongoing health or psychosocial problem at any given time, a figure that rises to more than 70% for children 8 years or older.[18] Inequities are also a major challenge. Developmental vulnerability, for example, varies from 15% to 33% between the least and most disadvantaged groups in early childhood.[19] Medicare (an insurance scheme that gives Australian citizens and permanent residents access to healthcare) spending on specialist services is greater for the better off than the less well off, pointing to inequities in access.

To address these issues, the Australian Government has launched multiple initiatives and reforms targeting child health, wellbeing and development, health inequities and the health

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[14] NHS England (2024). *Millions more dental appointments to be offered under NHS Dental Recovery Plan*. https://www.england.nhs.uk/2024/02/millions-more-dental-appointments-to-be-offered-under-nhs-dental-recovery-plan/

[15] Department of Health and Social Care, Department for Education (2023). *Family Hubs and Start for Life programme*. https://www.gov.uk/government/collections/family-hubs-and-start-for-life-programme

[16] Department for Education (2023). *Budget 2023: Everything you need to know about childcare support.* https://educationhub.blog.gov.uk/2023/03/16/budget-2023-everything-you-need-to-know-about-childcare-support/

[17] Labour Party (2024). *Labour's Child Health Action Plan will create the healthiest generation of children ever.* https://labour.org.uk/updates/stories/labours-child-health-action-plan-will-create-the-healthiest-generation-of-children-ever/

[18] Liu T *et al.* (2018). *Parent-reported prevalence and persistence of 19 common child health conditions.* Arch Dis Child **103**, 548–56.

[19] Gray S *et al.* (2021). *How can we improve equity in early childhood?* (AEDC 2021 Data Story). http://www.aedc.gov.au

and wellbeing of first nations groups. In 2023, it published a discussion paper on an early years strategy.[20]

Research initiatives include the BEBOLD (Better Evidence Better Outcomes Linked Data) platform,[21] the Kids-Link data platform in New South Wales, and the GenV Research Cohort,[22] Australia's largest parent and child longitudinal cohort with more than 115,000 participants. As well as tracking issues, these studies could also provide a test-bed for evaluating interventions. Professor Wake emphasised the need to move beyond the search for transformational 'silver bullet' interventions and to focus instead on the potential for incremental gains from multiple 'stacked' interventions.

Canada

As summarised by Professor Astrid Guttmann, Professor of Paediatrics, Health Policy and Public Health, and co-Director of the Edwin S.H. Leong Centre for Healthy Children at the University of Toronto,

Canada has a population of around 40 million, including 6.3 million children aged 0–14 years. Nearly 2 million people are Indigenous (First Nations, Metis or Inuit), a quarter of them children <15 years; more than 9 million identify as immigrants.

According to OECD data, social spending per child in Canada is relatively low. Across high-income countries, Canada ranked 30th out of 38 for child wellbeing, in part driven by high levels of mental ill-health and obesity. Young children growing up in Canada face multiple challenges, including high levels of poverty and food insecurity (one in five children live in food-insecure households), relatively high infant mortality, and incomplete vaccination schedules, and Indigenous children face a number of specific health challenges related to intergenerational trauma stemming from residential schools and other colonial practices as well as ongoing issues in access to care and other services. Outcome measures reported at the country level hide striking inequities experienced by a number of populations and communities.

A range of measures have been taken to address these issues: a new Canada Child Benefit system was launched in 2016; a universal, childcare scheme with low costs for families is currently being introduced for children under 6 years; a new dental benefit scheme for low-income families is being rolled out; and parental leave has been improved. Greater self-governance powers are being given to First Nations Peoples including for child welfare. Between 2015 and 2020, a significant decline in poverty rates was seen across all age groups, but most markedly for children, although there have been some increases in the most recent post-pandemic year.

However, Professor Guttmann argued, more could be done. There are currently no standing cross-ministerial governance structures at the provincial or national level focused

[20] Department of Social Services, Australian Government, Canberra (2024). *Early Years Strategy.* https://www.dss.gov.au/families-and-children-programs-services/early-years-strategy
[21] University of Adelaide (2024). *BetterStart, BEBOLD*. https://health.adelaide.edu.au/betterstart/bebold
[22] Generation Victoria (2024). *About GenV*. https://www.genv.org.au/about-genv/

on child and family health, and no national Children's Commissioner (although many provinces have child advocates or commissioners).

Japan

As outlined by Professor Hiroyuki Moriuchi, Professor of Paediatrics at the Graduate School of Biomedical Sciences and a Vice-Director at the National Research Center for the Control and Prevention of Infectious Diseases, Nagasaki University, Japan faces a range of challenges, including a declining birth rate, poor mental and social wellbeing among children, and high levels of child poverty in single-parent families.

In 2023, the fertility rate in Japan dropped to 1.2 (just over 2 is required to achieve population stability) and only 730,000 babies were born. Surveys suggest that, compared with people in comparable high-income countries, fewer people in Japan think it is easy to have and raise children. Public spending on families is relatively low, and the cost of raising and educating children is seen as a major disincentive to starting a family or having more children.

UNICEF analyses of child wellbeing, which look at physical health, mental health and skills (social and academic), rank Japan 20th out of 38 countries. Remarkably, though, it ranks first for physical health and 37th for mental health. The percentage of children reporting high life satisfaction is very low. Although Japan ranks fifth for proficiency in reading and mathematics at age 15, it is 37th for children's ability to make friends easily at age 15.

Japan has relatively low levels of wealth inequality, and correspondingly low infant mortality rates. However, almost 16% of children are living in poverty, in part because of large differences in poverty rates between single- and double-parent families.

Several child health and wellbeing indicators are showing concerning trends. These include a doubling in the numbers of children requiring constant medical care in the decade to 2018, relatively high child poverty and single-parent family poverty rates, and above-average scores for anxiety and experience of bullying. The numbers of patients with mental disorders and suicide rates in children have been rising.

Some efforts have been made to address these issues. These include the Healthy Parents and Children 21 initiative, a national campaign offering various kinds of support to mothers and children, while the Children and Families Agency promotes a child-centred approach across government and has taken on responsibilities for several aspects of child health and wellbeing from other departments.

New Zealand

As noted by Dr Sarah-Jane Paine, Associate Professor in Māori Health at Te Kupenga Hauora Māori at the University of Auckland, New Zealand is a relatively small country with a population of just over 5 million; 16% are indigenous Māori.

A historic agreement between the Māori and the British Crown set out Māori rights to good governance, self-determination and equity. In practice, however, Māori people still experience discrimination, social inequities, and worse health outcomes across the life-course, including in childhood. For example, Māori children are twice as likely to live in a household with

material hardship. On practically every child health indicator, Māori infants and children fare worse than their non-Māori peers.

New Zealand's Child and Youth Wellbeing Strategy has attempted to promote health and wellbeing and address these inequities.[23] Focusing on the first 1000 days, this strategy takes a community-based and holistic approach to improving child health and wellbeing.

In addition, the Pae Ora Act 2022 set out goals to improve health services and public health, for the benefit of all New Zealanders but with a special emphasis on eliminating health inequities. The Act envisages a radical overhaul of the country's health systems.[24] As Associate Professor Paine noted, the first 100-day plans for the coalition parties all suggest that the new New Zealand Government, elected in late 2023, is not committed to these reforms.

Singapore

As a city-state with around 6 million inhabitants and limited natural resources, Singapore is highly dependent on its human capital. One of the current concerns is Singapore's ageing population and low total fertility rate (0.97). By 2030, an estimated one in four of the population will be over 65 years of age and 11% less than 15 years old.

While Singapore has consistently performed higher than the average in the OECD Programme in the International Student Assessment (PISA), it comes with a high price of mental distress, as summarised by Dr Evelyn Law, Assistant Professor, Yong Loo Lin School of Medicine, National University of Singapore, and Professor Yap Seng Chong, Dean of the Yong Loo Lin School of Medicine, National University of Singapore. Based on data from the Growing Up in Singapore Towards healthy Outcomes (GUSTO) cohort,[25] by age 13 years, 15%–20% of children are experiencing high levels of depression and anxiety symptoms, and 16% self-reported deliberate self-harm. GUSTO involves nearly 1250 mother-child dyads recruited in early pregnancy between 2009 and 2010. These dyads are still being intensively monitored, with the offspring now reaching age 14 to 15 years of age.

Although mitigated by government transfers, housing assistance and tax policy, large health and social inequalities exist in maternal and child health and mental wellbeing.[26] These gaps widen in child development from infancy to school age. Maternal mental wellbeing may be a critical mediating factor for child outcomes, as the degree to which children are affected increases with the severity of maternal mental health symptoms. Efforts are now expanded in providing more holistic approaches in early relational health to create an environment in which younger children are better able to flourish.

Singapore is also noticeable for the close relationship between health researchers and policymakers. Key elements include policy briefs developed by the Centre for Holistic Initiatives for Learning and development (CHILD) and the TRUST (Trusted Research and Real

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[23] New Zealand Government (2024). *Child and youth wellbeing*. https://www.childyouthwellbeing.govt.nz/

[24] Manning J (2022). *New Zealand's bold new structural health reforms: the Pae Ora (Healthy Futures) Act 2022*. J Law Med **29(4),** 987–1005.

[25] Gusto Data Vault. https://gustodatavault.sg/

[26] Law EC (2021). *Income disparity in school readiness and the mediating role of perinatal maternal mental health: a longitudinal birth cohort study*. Epidemiol Psychiatr Sci **30,** e6.

World-Data Utilisation and Sharing Tech) platform,[27] which facilitates access to data, including that from government and public agencies.

South Korea

Noted by Dr Hyewon Lee, Director of the Global Maternal and Child Oral Health Center at Seoul National University in South Korea, the South Korean health system has many commendable features. Its national health insurance scheme is highly affordable and health services are readily accessible. However, one quirk of the system is that paediatricians are the lowest paid doctors, making 57% less than the average doctors' salary. When there is a high volume of child patients, paediatricians could survive through the low fee schedule through the national insurance system, but the system does not reflect the country's very low fertility rates, the lowest in the world at 0.72.

These trends have led to a crisis in paediatric care, leading to a shortage of specialists, particularly outside major cities. The South Korean Government has launched an initiative to train more medical students, but this has led to a backlash and strikes by the medical profession.

Doctors are arguing that attention should instead be given to promoting meaningful incentives for primary care doctors, such as paediatricians. Shortage is one angle, but maldistribution could be even more serious problem. They emphasised the focus on improving the pay and working conditions of primary health care doctors and trainees first before increasing the number of doctors.

Family-friendly policies matter as well. This could include promoting a society that places more value on the health and happiness of children; improving the environment in which they grow up; making it easier for households to bring up children; and reducing urban/rural disparities.

United States

Reflecting on the situation in the US, Professor Neal Halfon, Distinguished Professor of Pediatrics, Public Health and Public Policy, and the Founding Director of the University of California, Los Angeles Center for Healthier Children, Families & Communities, argued that young children in many high-income countries were the casualties of a dominant neoliberal model which favours free-market capitalism, deregulation and a reduction in government spending. The US is one of the world's most unequal societies, with socioeconomic stratification having a strong racial dimension.

Professor Halfon suggested that US social policy has attempted to shift from service provision targeting individual issues to those that link up different services and service systems. He suggested that high levels of need were straining such models and required not just a service system but an ecosystem approach that recognises and responds to the complex developmental ecosystem that influences early childhood health and development.

In addition, he pointed to flawed intervention models with designs that were of limited impact and hard to scale. More positively, he highlighted examples of integrated interventions from a

[27] Trust Platform. https://trustplatform.sg

range of settings across the US that appeared to be effective and have greater scope for scale-up. Nevertheless, he argued that the long-term need was for more systemic societal shifts that improve the early childhood developmental ecosystem and place greater emphasis on other key outcomes such as wellbeing, resilience, equity and sustainability.

Mapping a way forward

During discussion sessions, participants examined similarities and differences between countries, how data can be used to drive action on child health inequalities, and potential interventions and policies that could positively affect child health and development up to the age of 5 years, and the potential for collaborations to effect change. These discussions highlighted a range of key themes:

Children, families and other caregivers should be at the heart of developing solutions to better health, education, wellbeing, and equity

It was widely recognised at the meeting that children, families and caregivers should be central to policymaking, and involved in associated research. Although there can be numerous challenges for children to communicate their needs themselves, participants felt it was imperative for their voices to be central to decision-making. Of particular importance, was the need for policymakers to hear directly from representatives from a **diverse range of backgrounds**, especially those affected and with lived experience of social disadvantage, including racism, discrimination and marginalisation, a particularly important issue for countries with native or aboriginal populations.

Delegates also argued that engagement must be based on a **relationship of trust**. It was suggested that families should be seen not simply as recipients of welfare, but as trusted partners involved in the co-design of solutions. For example, there was thought to be a tendency to provide specific items rather than general financial support that could be used in ways that families see as most appropriate, indicating a lack of trust in families and caregivers. Nevertheless, some delegates felt that a more liberal strategy could be open to abuse.

A cross-sectoral vision and long-term funding approach will enable governments to address the inequities which are leading to the decline in children's health and wellbeing

While health is a key outcome of interest, delegates noted that most factors affecting child health and wellbeing are social in origin. In effect, health services provide a 'rescue service', dealing with the health consequences of issues whose roots lie outside the health domain. It was therefore argued that action was needed to address root causes of poor child health and inequities across a range of sectors.

Healthcare systems and social care are facing high demand in some high-income countries. Largely, this is being driven by social determinants of health. While the causes of ill health lie in areas such as employment, the environment and education, the consequences – including poor mental health, poor oral health and obesity – are dealt with within health systems. Health inequities arise primarily because of differential exposures to these risk factors.

Delegates argued that deep structural reform is therefore required to address the root causes of child ill health and delayed development, by tackling key social determinants such as poverty, lack of opportunities and harmful environmental exposures. It was suggested that

this would require strong political will and a long-term commitment to creating more favourable conditions for families and reducing inequalities.

Participants noted that a **co-ordinated and integrated response** was required across Government, to ensure that policies are aligned and consistent with overarching child health and development aims, and long-term investment to underpin this. Possible approaches suggested included the **'health in all policies' model**, whereby all new policies include consideration of potential impacts on child health and development, or **impact assessments** for specific draft policies.

Other suggested strategies included the creation of **cross-governmental structures** with responsibility for setting, co-ordinating or aligning policies relevant to child health and development. Participants also discussed having a **Minister for children or child health 'champions' within government** whose responsibility it is to promote policymaking that benefits child health and development and ensure that possible impacts on children are considered during policymaking. Enshrining these principles in legislation was also discussed as it could demonstrate their fundamental importance and help ensure child health does not become politicised, but is seen as a shared national goal for everyone across the political spectrum.

Another point emphasised by participants was the need to adopt a **population-level focus**. Social challenges to child health and development are now so pervasive that concentrating just on extremes will be unlikely to deliver significant public health gains. Nevertheless, some tailoring will be required for those most in need of intensive support because of high levels of adversity. This approach can be seen as a **'universal but not uniform'** approach.

Transformational change is needed over generations, enabled by strong leadership from Government

Workshop participants highlighted how child health, development and wellbeing is not only governed by their household context, but also the wider physical and social environment in which they are raised.

Factors such as poverty, economic insecurity and access to opportunities are associated with worse health, wellbeing and development outcomes. These are likely mediated through the reduced capacity of parents and other caregivers to provide the necessary support during critical periods of childhood, for example because of financial insecurity, impacts on parental mental health, and exposure to less healthy physical environments, including greater exposure to air pollution and limited access to green space and healthy nutrition.

In some high-income countries, multiple societal trends are affecting the ability of parents and other caregivers, particularly those who are economically insecure, to provide the healthy and nurturing environment that young children need to thrive.

While it was acknowledged that parents and other caregivers have the primary responsibility for raising children, deep-seated systemic societal factors and inequities are creating conditions which can make it increasingly difficult for many parents and caregivers to care for children. Many may be unable to devote the time and energy to parenting because of other demands on their time and resources. Some may feel that raising a child can be unaffordable, especially those who are just above the poverty threshold, which could be a reason for the decrease in birth rates in some countries.

Participants argued that parents and other caregivers often have limited capacity to influence their situation. It was therefore suggested that governments should recognise their critical role in creating environments that value and facilitate high-quality parenting to enhance child health and development.

Participants also noted that public investment in **social services** could make a major contribution to creating an environment more conducive to child health and development, and help to address health inequities. This investment likely needs to be front-ended in order to see the catalytic change needed to transform social services.

We already have a strong evidence base to support some effective solutions and policymakers should focus on implementing these solutions, working closely with children and families

Delegates argued that the links between early-life adversity and detrimental effects on lifecourse health had been irrefutably proven.[28,29] They also suggested that there is some evidence available on the beneficial impact of certain policy initiatives to improve child health, wellbeing and development, which meant that there was enough evidence to start implementing some policies.[30]

One example provided was the UK SureStart programme. Evaluations suggested that it had demonstrable impacts on child health and development, reducing hospital admissions by 13,000 a year,[31] reducing health inequalities,[32] and improving educational performance, particularly among the most socially disadvantaged.[33] Conversely, cuts in SureStart provision were associated with increased rates of childhood obesity.[34]

Using examples such as SureStart, it was argued that lack of evidence was not a justification to delay implementation of some more child-friendly policies. Nevertheless, it was acknowledged that scale-up and implementation of pilot interventions can be challenging, and it was suggested that the scalability of interventions should be considered early in the development process. Importantly, it was agreed that some key knowledge gaps did remain which could be addressed through additional research.

Researchers should work across borders and disciplinary boundaries to gain a deeper understanding of causes and the impact of policy initiatives and other interventions

Whilst we have some key evidence to enable us to start implementing policies for child health and wellbeing, participants discussed the key role researchers have to play in closing further

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[28] Rod NH, *et al.* (2020). *Trajectories of childhood adversity and mortality in early adulthood: a population-based cohort study*. Lancet **396**, 489–97.
[29] Hughes K, *et al.* (2017). *The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis*. Lancet **2**, 356–66.
[30] Pickett K, *et al* (2021). *The Child of the North: building a fairer future after COVID-19*. https://www.thenhsa.co.uk/app/uploads/2022/01/Child-of-the-North-Report-FINAL-1.pdf
[31] O'Dowd A (2021). *Sure Start children's centres prevented 13,000 hospital admissions a year, study estimates*. *BMJ* **374,** n2032.
[32] Mahase E (2019). *Sure Start cut child admissions and health inequalities, report finds*. ***BMJ***, 365, l4043.
[33] Institute for Fiscal Studies (2024). *Sure Start greatly improved disadvantaged children's GCSE results*. https://ifs.org.uk/news/sure-start-greatly-improved-disadvantaged-childrens-gcse-results
[34] Mason KE et al. (2021). *Impact of cuts to local government spending on Sure Start children's centres on childhood obesity in England: a longitudinal ecological study.* J Epidemiol Community Health **75,** 860–6.

knowledge gaps, reducing uncertainties, and supporting implementation of new policy initiatives and interventions.

The causes of poor child health and development are mostly well understood, although further evidence could be generated in some specific areas or for particular populations. A higher priority may be the generation of evidence on the impact of policy initiatives and interventions and ways to optimise their implementation.

Given the nature of the area, it was felt that research would benefit from being **intersectoral**, **interdisciplinary** and **international**, to provide a comparative perspective. Health researchers need to work with colleagues in other disciplines on impacts, root causes and mitigation measures. Multiple types of data, both **quantitative and qualitative**, are important, depending on intended use and audiences.

It was acknowledged that **data linkage** was often likely to be challenging, particularly for data sources outside health. **Data ownership** could also raise issues, and data sharing would need to be discussed sensitively with those providing data, to ensure that they are supportive of intended uses. For some populations, historical use of data may make them disinclined to approve some uses of data. Respectful engagement and dialogue is necessary, and decisions respected even if they are not felt to be in a community's best interests.

Participants also highlighted the value of **large-scale data platforms** and **cohort studies** to generate evidence on impacts and interventions. These platforms could potentially provide a foundation for international collaborations and be leveraged to answer a wide range of research questions. While some cohorts exist, it was suggested that, to support data generation and testing of interventions, countries should establish large, long-term **early-life cohorts**, collecting a wide range of social and biological data, and promote linkage to other health and social data sources.

In addition, it was felt that researchers should aim to **work closely with policymakers**, following the example of Singapore. Engagement can take the form of co-design of studies to ensure that they address a critical policy question and deliver actionable evidence. Research could help to **assess the impact** of new policy initiatives and interventions. Early involvement of researchers in policymaking could help to identify appropriate process and outcome indicators, and facilitate effective monitoring and evaluation. The importance of using appropriate and accessible language, and producing outputs suitable for policymakers, was also stressed.

Health economic modelling was thought to be an area where more research is needed to inform policymaking, again emphasising the need for interdisciplinarity. It was argued that more comprehensive economic models were needed that better capture the full societal value of interventions, for example on young people's mental health.

Conclusions

As highlighted by participants at the workshop, addressing the worrying decline in child health and wellbeing will require **transformational change**, led by strong **political will** and a **long-term cross-sectoral approach**. This must **centre the voice of children, families and caregivers**, who should be seen as active partners, contributing to solutions, rather than just as recipients of social and health support.

Multiple high-income countries are grappling with significant child health and wellbeing challenges – physical or mental health issues, or both – and health inequities. Consequences are being felt at the individual level (in terms of the numbers of children affected by poor physical or mental health) and at the national level (such as greater demands on health and social care, a less healthy and productive workforce, and inadequate human capital to meet a country's long-term needs).

Poor child health and wellbeing is largely due to circumstances outside medicine and mostly reflects the long-term consequences of social and economic policies. Participants noted that **Governments do have an important role to play** in creating environments that value and facilitate high-quality parenting to enhance child health and development.

The workshop demonstrated that some countries are facing similar challenges, highlighting the importance of **international exchanges.** Different ideas and solutions can be shared for mutual benefit and sharing of data will strengthen the evidence base, and methodological advances can be rapidly disseminated through international networks.

Participants also discussed the **critical role that researchers can play, and the importance of international collaboration**. The research community has been highly active in documenting and raising awareness of the extent and impact of child ill-health and wellbeing and of health inequities. It can play an equally important role in the development and evaluation of solutions, working in partnership with policymakers.

While the workshop focused on countries with known child health and development challenges, much could be learned from countries in which child health metrics are more positive. Children appear to be faring much better in multiple European countries such as in Scandinavia, for example, and a comparative approach could reveal why, and whether successful models could be replicated elsewhere.

Annexes

Annexe one: Steering Committee

Workshop chair - Professor Rosalind Smyth CBE FMedSci, University College London

Professor Louise Baur AM PresAHMS, University of Sydney

Professor Astrid Guttman, University of Toronto

Dr Evelyn Law, National University of Singapore

Professor Hyewon Lee, Seoul National University

Professor Hiroyuki Moriuchi, Nagasaki University

Dr Oliver Mytton, University College London

Professor David Taylor-Robinson, University of Liverpool

Professor Denise Wilson FRSNZ, Auckland University of Technology

Annexe two: Attendees

Associate Professor Polly Atatoa Carr, University of Waikato

Associate Professor Renee Boynton-Jarrett, Boston University

Dr Francine Buchanan, Ontario Child Health Support Unit, Sick Kids

Professor Yap Seng Chong, National University of Singapore

John Davidson, parent

Professor Tamsin Ford CBE FMedSci, University of Cambridge

Professor Ruth Gilbert, University College London

Professor Sharon Goldfeld, The Royal Children's Hospital Melbourne, Murdoch Children's Research Institute

Professor Neal Halfon, University of California, Los Angeles

Professor Pia Hardelid, University College London

Professor Catherine Law CBE FMedSci, University College London

Professor John Lynch, The University of Adelaide

Professor Helen Minnis FMedSci, University of Glasgow

Dr Naho Morisaki, National Center for Child Health and Development

Ngawai Moss, parent

Associate Professor Arijit Nandi, McGill University

Professor Natasha Nassar, University of Sydney

Professor Dipesh Navsaria, University of Wisconsin

Dr Ray Nethercott, Royal College of Paediatrics

Associate Professor Sarah-Jane Paine, University of Auckland

Dr Ernest Purvis, Children in Northern Ireland

Professor Paul Ramchandani, University of Cambridge

Professor Elaine Reese FRSNZ, University of Otago

Dan Segetin, parent

Dr Sonoko Sensaki, National Center for Child Health and Development

Dr Lola Solebo, University College London

Professor Rachel Taylor FRSNZ, University of Otago

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